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ijmrset@gmail.com



www.ijmrset.com



# Augmented Analytics

**Prof. Barnali Chakraborty, Faisal Hussain, Dr. Pavan G P**

Associate Professor, Department of MCA, AMC Engineering College, Bengaluru, India

4th Semester MCA, Department of MCA, AMC Engineering College, Bengaluru, India

Department of ISE, AMC Engineering College, Bengaluru, India

**ABSTRACT:** Augmented analytics represents a revolutionary approach of analytics of data that incorporates artificial intelligence (AI) and learning of machine (ML) technologies into the analytics workflow. This paper explores the improvements of augmented analytics over traditional analytics, and highlights the potential it can offer. The capabilities of multidisciplinary users with an emphasis on their enhanced capabilities includes a comparative analysis of enhanced analytical tools. Key findings highlight the impact of enhanced analytics on decision-making processes, efficiency gains, and democratization, organizations. Furthermore, of data, the paper discusses challenges that associated with operations, such as data quality control and skill set requirements. Finally, augmented analytics is emerging as a major advancement in the industry, poised to redefine how organizations use data to gain strategic advantage in the digital age.

**KEYWORDS:** Augmented Analytics, Artificial Intelligence (AI), Machine Learning (ML), Data Analytics.

## I. INTRODUCTION

Augmented analytics present and rising software program technology including superior data, gadget getting to know (ML) to broaden sophisticated insights from statistics. Augmented analytics is a class of analytics powered by synthetic intelligence (AI) and machine gaining knowledge of (ML) that expands a human's capacity to have interaction with statistics at a contextual level. In the generation of massive statistics and virtual transformation, groups are an increasing number of reliant on records-driven insights to advantage competitive blessings and force innovation. Traditional processes to analytics, even as treasured, regularly require sizeable understanding and time-eating guide effort to extract significant insights from complex datasets.

Augmented analytics emerges as a transformative paradigm that integrates artificial intelligence (AI) and machine studying (ML) technology into the analytics workflow, promising to enhance the skills of analysts and decision-makers alike. Augmented analytics represents a shift from traditional methods with the aid of automating records training, evaluation, and insight technology procedures. By leveraging AI and ML algorithms, augmented analytics structures can autonomously perceive patterns, correlations, and outliers in data, thereby reducing the dependency on guide attempt and expert knowledge. This no longer simplest hurries up the rate at which insights are derived but additionally democratizes get right of entry to analytics talents across a corporation.

The concept of augmented analytics includes a spectrum of functionalities for query and record era, automatic records visualization, and predictive modelling. These functionalities permit customers with various stages of technical information to engage intuitively with statistics and extract actionable insights without deep expertise of statistical strategies or programming languages. This paper objectives to discover the evolution, benefits, demanding situations, and packages of augmented analytics in current business contexts. It will delve into the underlying technology that energy augmented analytics structures, take a look at case research illustrating its realistic implementation and impact, and speak the results for selection-making approaches and organizational method.

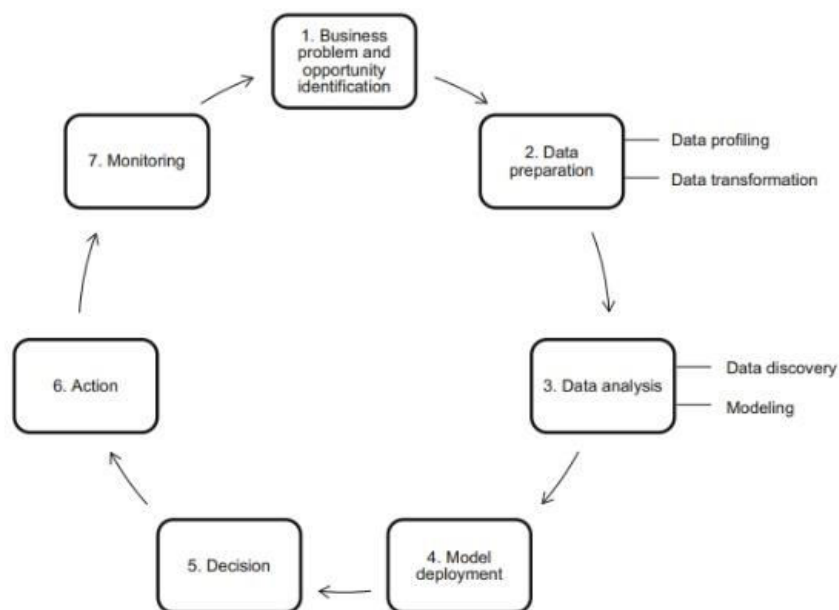


Figure 1. Analytics cycle

## II. LITERATURE REVIEW

We processed hundreds to tens of thousands of unstructured and semi-structured data sets. On the Internet of things, cloud computing, and social software are all based on Big Data. Companies are accumulating larger lists and unstructured data. Despite the availability and ever-increasing availability of data, much more can be done. Traditional B.I Solutions cannot handle large amounts of unstructured data. Gain critical insights, Data Science offers various Data Analytics techniques.

Big data analytics way to do better Decisions made. The volume, velocity, and variety of data generated on a daily basis requires new analytical techniques.

Most of the community Recent developments are augmented analytics. That includes machine learning and Integrating AI with traditional research. Unlike traditional analytics or BI tools, these AI solutions are continuously improving results and learn from their experiences.

Data science allows augmented analytics to be integrated into business processes Data scientists in order to better test more data, eliminate human error and even predict biases

In addition to helping business users and executives make data-driven product choices without the help of data scientists or IT specialists, augmented analytics can provide unbiased guidance on what to do next. BI solutions the industry is highly dynamic, and we expect edge computing and NLP to revolutionize BI systems.

Francia, Matteo and others proposed an approach that, based at the sensed augmented context (supplied by way of wearable and clever gadgets), proposes a set of applicable analytical queries to the user. This is completed by using counting on a mapping among the entities that may be recognized with the aid of the gadgets and the factors of the employer statistics, and also taking into account the queries preferred by way of customers at some point of preceding interactions that occurred in similar contexts. A set of experimental checks evaluate the proposed approach in terms of performance and effectiveness.

Augmented analytics offers several key benefits. Firstly, it democratizes get admission to superior analytical abilities by using lowering the dependency on specialized information technology competencies. Through capabilities like computerized insights generation and natural language processing (NLP), augmented analytics empowers enterprise users to discover and interpret facts independently.



Advanced analytics finds numerous packages in various industries and useful regions. For example, in healthcare, it assists in medical choice by reading information about affected individuals to identify trends and expected effects (Wu et al., 2018). In advertising, marketing and sales, advanced analytics complement buyer segmentation and focus strategies by studying customer behavior and preferences.

### III. METHODOLOGY

#### A. EXPERIMENTAL RESEARCH:

Conduct experiments to assess the effectiveness of augmented analytics tools in comparison to conventional strategies. This may want to involve designing controlled studies where one-of-a-kind analytics tools are tested at the identical datasets to degree elements like accuracy, velocity, and user pleasure.

#### B. CASE STUDIES:

Analyse real-world cases wherein augmented analytics has been applied. The challenges they confronted, and the consequences performed. This qualitative approach can supplement quantitative statistics from experiments.

#### C. SURVEYS AND INTERVIEWS:

Use surveys and interviews to gather statistics at the perceptions, expectancies, and reviews of users and stakeholders regarding augmented analytics. Provide nuanced insights into person popularity, worries, and areas for improvement.

#### D. DATA MINING AND ANALYSIS:

Apply facts mining techniques to massive datasets to find patterns, correlations, and developments that augmented analytics tools can help pick out extra correctly. This method can demonstrate the realistic programs and blessings of the usage of augmented analytics in complex statistics environments.

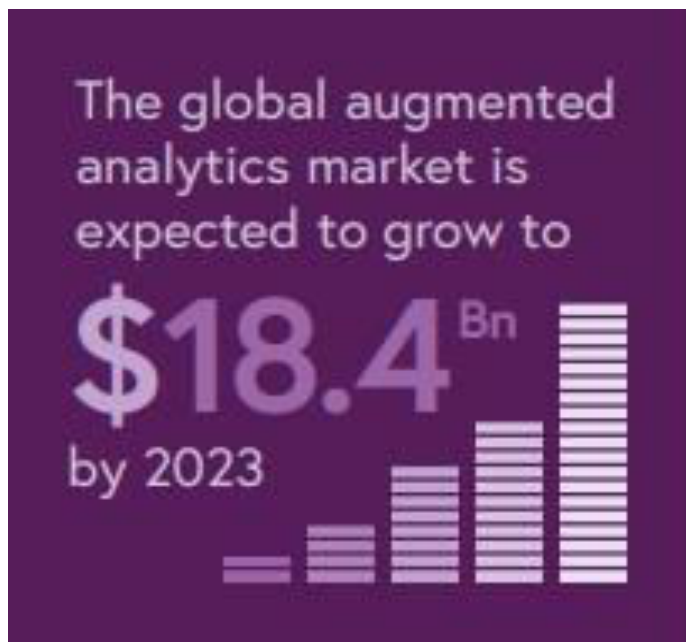


Figure 2. Result

### IV. Q&A

#### What is Augmented Analytics?

Augmented Analytics uses artificial intelligence (AI) to automate the process of preparing, analysing, and visualizing data.



**What are the goals of Augmented Analytics?**

Its goal to accessible and understandable data insights to non-technical users, enabling better- informed decision-making.

**How does Augmented Analytics help businesses?**

This help organizations to identify patterns, correlations, and anomalies in their data, market trends, and operational performance

**V. CONCLUSION**

**Summary of Findings:** Begin via summarizing the primary findings of your studies. Highlight the consequences obtained from your preferred studies strategies, along with experimental studies, case analyses, surveys, or records mining. Provide a concise evaluation of what your look at has discovered approximately the effectiveness, adoption, or effect of augmented analytics within the context you explored.

**Implications for Theory and Practice:** Discuss the theoretical and sensible implications of your findings. How do your consequences make a contribution to current know-how about augmented analytics? Enhance facts evaluation capabilities, or remodel business approaches? Address any theoretical frameworks or fashions that your findings assist or project.

**Practical Recommendation:** Based to your findings, policymakers, or researchers inquisitive about augmented analytics. These hints may want to relate to optimizing the implementation of augmented analytics gear, addressing demanding situations recognized for your look at, or suggesting regions for future research and improvement.

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